Appl. No.: 10/665,910

Amdt. dated: March 10, 2006

Reply to Office Action of: December 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1.-7. (canceled)
- 8. (previously presented) A method for producing a thin-film magnetic head, comprising:

forming a magnetic core having magnetic layers; and

forming a magnetic gap film facing said magnetic core;

wherein a magnetic layer, of said magnetic layers, is formed by electroplating in a plating bath having pH value of 2 or less;

wherein said magnetic layer contains Co, Ni, and Fe, with $20 \le Co \le 40$ wt%, $0 < Ni \le 2$ wt%, and $60 \le Fe \le 80$ wt%, and has a saturation magnetic flux density of 23,000 gauss or more; and

wherein said magnetic layer which is formed by electroplating is the nearest plated layer to said magnetic gap of said magnetic layers.

- 9. (previously presented) A method for producing a thin-film magnetic head as defined in claim 8, wherein said magnetic core includes an upper magnetic core and a lower magnetic core.
- 10. (previously presented) A method for producing a thin-film magnetic head as defined in claim 9, wherein either of said upper magnetic core or said lower magnetic core has said magnetic layer.
 - 11. (canceled)
- 12. (previously presented) A method for producing a thin-film magnetic head, comprising:

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forming a read element;

forming a first magnetic layer above said read element;

forming a magnetic gap film above said first magnetic layer;

forming a coil and insulating layer above said first magnetic layer;

forming an underlayer for electroplating above said magnetic gap by

sputtering;

forming a second magnetic layer on said underlayer by electroplating; wherein at least a first part of said second magnetic layer contains Co, Ni, and Fe, with $20 \le \text{Co} \le 40 \text{ wt}\%$, $0 < \text{Ni} \le 2 \text{ wt}\%$, and $60 \le \text{Fe} \le 80 \text{ wt}\%$, and has a saturation magnetic flux density of 23,000 gauss or more.

13. (previously presented) A method for producing a thin-film magnetic head, according to claim 12,

wherein said second magnetic layer is electroplated in a plating bath having pH value of 2 or less.

14. (previously presented) A method for producing a thin-film magnetic head, according to claim 12,

wherein at least a second part of said second magnetic layer contains NiFe which has a higher Ni percentage than said first part; and

wherein said first part is closer to said magnetic gap compared to said second part.

15. (previously presented) A method for producing a thin-film magnetic head, comprising:

forming a read element;

forming a first magnetic layer above said read element;

forming a magnetic gap film above said first magnetic layer;

forming a coil and insulating layer above said first magnetic layer;

forming a second magnetic layer above said magnetic gap;

wherein said first magnetic layer is formed by electroplating in a plating bath having pH value of 2 or less;

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wherein at least a first part of said first magnetic layer contains Co, Ni, and Fe, with $20 \le \text{Co} \le 40$ wt%, $0 < \text{Ni} \le 2$ wt%, and $60 \le \text{Fe} \le 80$ wt%, and has a saturation magnetic flux density of 23,000 gauss or more.

16. (currently amended) A method for producing a thin-film magnetic head, according to claim 15,

wherein at least a second part of said first [[magnet]] magnetic layer contains

NiFe which has a higher Ni percentage than said first part, and

wherein said first part is closer to said magnetic gap compared to said second part.

17. (previously presented) A method for producing a thin-film magnetic head, according to claim 15, further comprising:

forming a NiFe layer under said first magnetic layer.